

525, 263

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



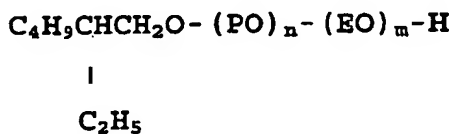
(43) International Publication Date
15 January 2004 (15.01.2004)

PCT

(10) International Publication Number
WO 2004/005230 A1

- (51) International Patent Classification⁷: **C07C 43/11**, 41/03, C11D 1/72
- (21) International Application Number: PCT/SE2003/001049
- (22) International Filing Date: 19 June 2003 (19.06.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 0202100-4 4 July 2002 (04.07.2002) SE
- (71) Applicant (for all designated States except US): **AKZO NOBEL NV** [NL/NL]; P.O. Box 9300, NL-6800 SB Arnhem (NL).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **BERGSTRÖM, Karin** [SE/SE]; P1 3842 Restad, S-442 95 Kungälv (SE).
- (74) Agent: **ANDERSSON, Rolf**; Akzol Nobel Surface Chemistry AB, S-444 85 Stenungsund (SE).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AN ALKOXYLATE MIXTURE AND ITS USE AS A CLEANING AGENT FOR HARD SURFACES



(I)

(57) Abstract: The invention relates to an alkoxyate mixture having formula (I) where PO is a propyleneoxy unit, EO is an ethyleneoxy unit, n has an average value in the range 1.6 - 3.3 per 2-ethylhexyl group and m has an average value in the range 3.0 - 5.5 per 2-ethylhexyl group, and containing less than 1.5 % by weight of unreacted 2-ethylhexanol; the said mixture being obtained by reacting 2-ethylhexanol in a first step with propylene oxide and in a second step the propoxylated mixture obtained with ethylene oxide. The alkoxyate mixture is a good cleaning surfactant and wetting agent and is also readily biodegradable.

WO 2004/005230 A1